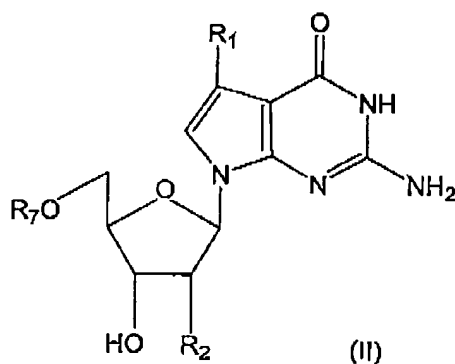


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CLAIM AMENDMENTS DISCUSSED DURING THE INTERVIEW

(The status of all claims is shown)

1. (Currently amended) Molecule comprising the following moiety:



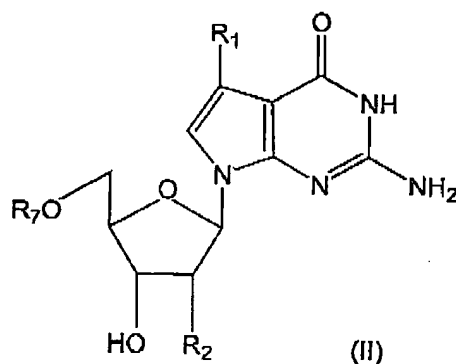
wherein R_1 is C_{1-10} alkyl group substituted by hydroxyl, ~~amino~~, C_{1-4} alkoxy or halo; and R_2 is hydrogen and R_7 is H or a mono-, di-, or tri-phosphate or thiophosphate thereof.

2. (Original) The molecule of claim 1, wherein said molecule is a nucleic acid polymer.
3. (Original) The molecule of claim 2, wherein said nucleic acid is DNA.
4. ~~(Original) The molecule of claim 2, wherein said nucleic acid is RNA.~~

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5. (Currently amended) Method for determining the nucleotide base sequence of a DNA molecule comprising the steps of:

incubating a DNA molecule annealed with a primer molecule able to hybridize to said DNA molecule in a vessel containing a molecule comprising the following moiety of formula (II):



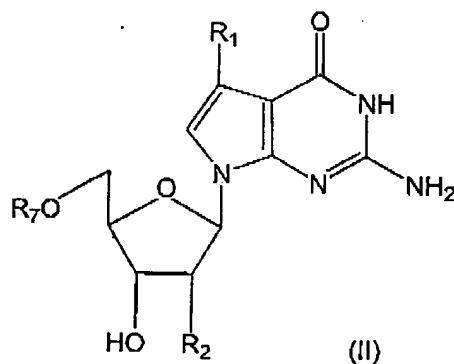
wherein R_1 is C_{1-10} alkyl group optionally substituted by hydroxyl, amino, C_{1-4} alkoxy or halo; R_2 is hydrogen or hydroxyl; and R_7 is a tri-phosphate or thiophosphate thereof; a DNA polymerase and at least one DNA synthesis terminating agent which terminates DNA synthesis at a specific nucleotide base in an incubating reaction; and

separating DNA products of the incubating reaction according to size whereby at least a part of the nucleotide base sequence of said DNA molecule can be determined.

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6. (Currently amended) Method for elongation of an oligonucleotide sequence comprising the step of:

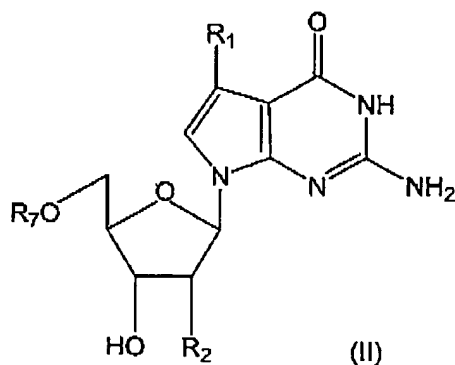
incubating an oligonucleotide sequence with a molecule comprising the following moiety of formula (II):



wherein R_1 is C_{1-10} alkyl group substituted by hydroxyl, ~~amino~~, C_{1-4} alkoxy or halo; R_2 is hydrogen; and R_7 is a tri-phosphate or thiophosphate thereof, and a DNA polymerase such that said molecule is added to the oligonucleotide sequence.

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7. (Currently amended) A compound of the formula (II):



wherein R₁ is C₁₋₁₀ alkyl group substituted by hydroxyl, ~~amino~~, C₁₋₄ alkoxy or halo; R₂ is hydrogen; and R₇ is H or a mono-, di-, or tri-phosphate or thiophosphate thereof.

8. (Original) A compound according to claim 7, wherein R₁ is C₂₋₈ alkyl group.

9. (Original) A compound according to any of the claims 7 or 8 wherein the compound of the formula (II) is present as a triphosphate.

~~10. (Previously presented) 7-Ethyl-7-deaza-2'-deoxyguanosine or a mono-, di-, or tri-phosphate thereof.~~

~~11. (Previously presented) 7-Propyl-7-deaza-2'-deoxyguanosine or a mono-, di-, or tri-phosphate thereof.~~

12. (Previously presented) A compound of claim 7, wherein said compound is 7-Hydroxymethyl-7-deaza-2'-deoxyguanosine or a mono-, di-, or tri-phosphate thereof.

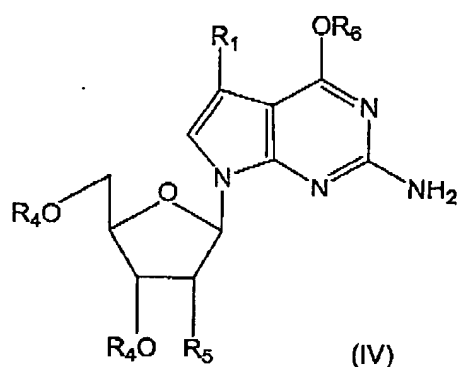
13. (Currently amended) A compound according to any one of claim ~~10, 11, or~~ 12, wherein said compound is a triphosphate.

14. (Currently amended) A process for the preparation of a compound of the formula (II) wherein R₁ is C₁₋₁₀ alkyl group ~~optionally~~ substituted by hydroxy, ~~amino~~, C₁₋₄ alkoxy or halo; R₂

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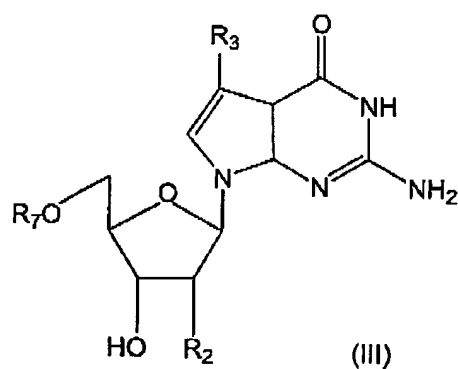
is hydrogen or hydroxy; and R_7 is H or a mono-, di-, or tri-phosphate or thiophosphate thereof, which comprises:

(i) the deprotection of a compound of the formula (IV):



wherein R_1 is C_{1-10} alkyl group substituted by hydroxy, amino, C_{1-4} alkoxy or halo and R_4 is a protecting group, R_5 is hydrogen or a group ~~OR~~ R_4 and R_6 is a protecting group which is the same or different to R_4 , or

(ii) when R_1 is other than methyl the reduction of a compound of the formula (III)



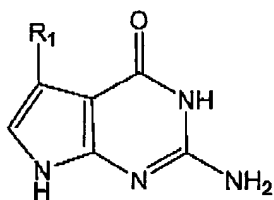
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wherein R_2 is hydrogen, R_3 is C_{2-20} alkynyl group substituted by hydroxyl, amino, C_{1-14} alkyl substituted amino, C_{1-4} alkoxy or halo, and R_7 is H or a mono-di-, or tri-phosphate thereof;

(iii) and optionally thereafter preparing a mono-, di-, or triphosphate or thiophosphate.

15. (Currently amended) A nucleotide sequence containing a compound of any one of claims ~~10, 11, or~~ 12.

16. (Currently amended) A deoxyribonucleic acid sequence containing a base of the formula:



(IIA)

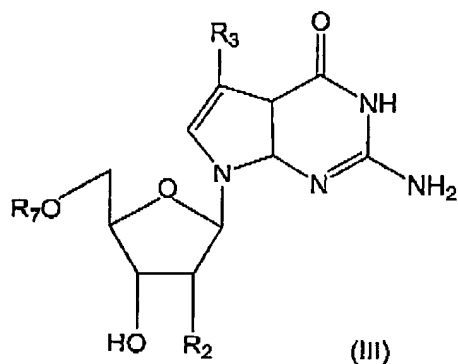
wherein R_1 is a C_{1-10} alkyl group substituted by hydroxyl, ~~amino~~, C_{1-4} alkoxy or halo.

17. (Cancelled)

18. (Cancelled)

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19. (Previously presented) A compound of the formula (III):



wherein R_2 is hydrogen or hydroxyl and R_3 is C_{2-10} alkynyl group substituted by hydroxyl, C_{1-4} alkyl substituted amino, C_{1-4} alkoxy or halo, and R_7 is a mono-, di-, or tri-phosphate or thiophosphate thereof.

20. (Previously presented) A compound of claim 7 wherein R_7 is a di-, or tri-phosphate or thiophosphate thereof.

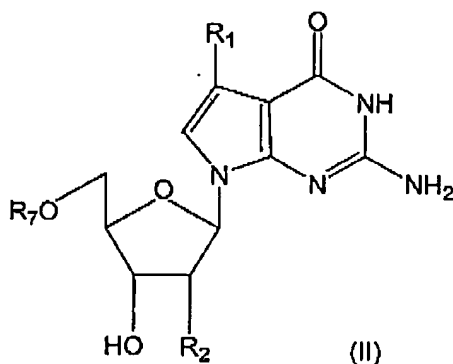
21. (Previously presented) The method of claim 5, wherein said molecule containing a moiety of formula (II) is a compound of formula (II).

22. (Previously presented) The method of claim 6, wherein said molecule containing a moiety of formula (II) is a compound of formula (II).

23. (Currently Amended) A method for determining the nucleotide base sequence of a DNA molecule comprising the steps of:

incubating a DNA molecule annealed with a primer molecule able to hybridize to said DNA molecule in a vessel containing a compound of formula (II):

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wherein R_1 is an isopropyl group ~~C_{1-10} alkyl group optionally substituted by hydroxyl, amino, C_{1-4} alkoxy or halo~~; R_2 is hydrogen or hydroxyl; and R_7 is a tri-phosphate or thiophosphate thereof; a DNA polymerase, and at least one DNA synthesis terminating agent which terminates DNA synthesis at a specific nucleotide base in an incubating reaction; and separating DNA products of the incubating reaction according to size whereby at least a part of the nucleotide base sequence of said DNA molecule can be determined.

~~24. (New) The method of claim 23, wherein said compound of formula (II) is a compound of claim 7.~~

~~25. (New) The method of claim 23, wherein said compound is 7-Ethyl-7-deaza-2'-deoxyguanosine.~~

~~26. (New) The method of claim 23, wherein said compound is 7-Propyl-7-deaza-2'-deoxyguanosine.~~

~~27. (New) The method of claim 23, wherein said compound is 7-Hydroxymethyl-7-deaza-2'-deoxyguanosine.~~

~~28. (New) The method of claim 5, wherein said molecule comprising the moiety of formula (II) is a molecule of claim 1.~~

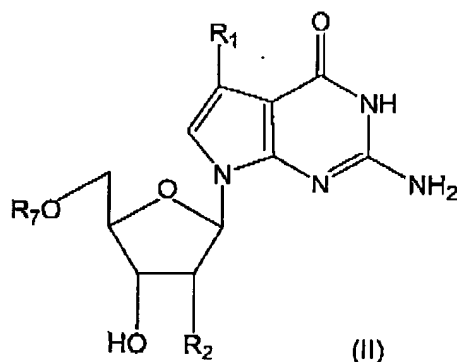
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~~29. (New) The method of claim 5, wherein said moiety of formula (II) is 7-Ethyl-7-deaza-2'-deoxyguanosine.~~

~~30. (New) The method of claim 5, wherein said moiety of formula (II) is 7-Propyl-7-deaza-2'-deoxyguanosine.~~

31. (Previously presented) The method of claim 5, wherein said moiety of formula (II) is 7-Hydroxymethyl-7-deaza-2'-deoxyguanosine.

23. (New) A compound of formula (II):



wherein R_1 is an isopropyl group; R_2 is hydrogen or hydroxyl; and R_7 is a mono-, di- or tri-phosphate or thiophosphate thereof.

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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

Date January 7, 2005

By



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